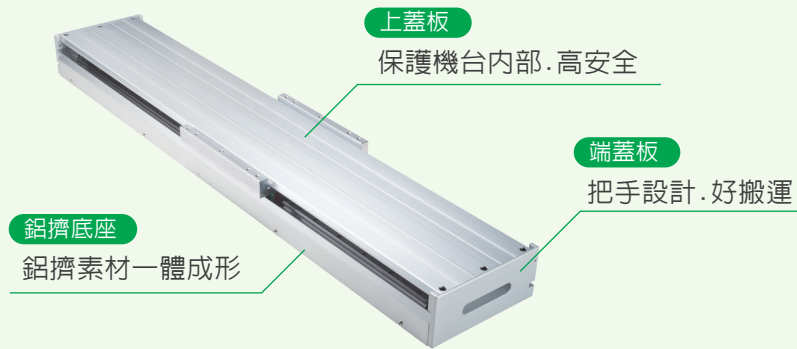


特性說明

- 短交期
- 使用簡單
- 高CP值
- 含驅動器
- 高加速度與速度, 超越螺桿速度
- 可以支援長行程
- 可以支援複數動子

應用產業

自動化、電子業、半導體業、包裝業



SSA Highlights

5000 mm/s
最大速度

0.1 μ m
高解析度

± 1 μ m
最佳重現精度

編碼模式

LMSSA-18S100-800-GS-S-D-A0

寬度系列

18, 20

線性馬達型式

S: 鐵心式LMSA
C: 無鐵心U型LMC

額定推力等級(N)

100, 200, 300, 500

行程 (mm)

200,250,300,350,400,450,500,550,600,
650,700,750,800,850,900,950,1000,1050,
1100,1150,1200 (可達2700mm)

編碼器

G:數位光學1 μ m
K:數位光學 0.1 μ m
E:數位磁性1 μ m

非標準選用項目

A0: 標準件
AC: 其他客戶項目
(如拖鏈、複數動子、數位霍爾..等,
請連繫HIWIN MIKROSYSTEM)

驅動器

D: 驅動器含接頭

外罩

S: 標準外罩與側蓋
N: 無外罩與側蓋

接線長度與接頭

S*: 標準規格

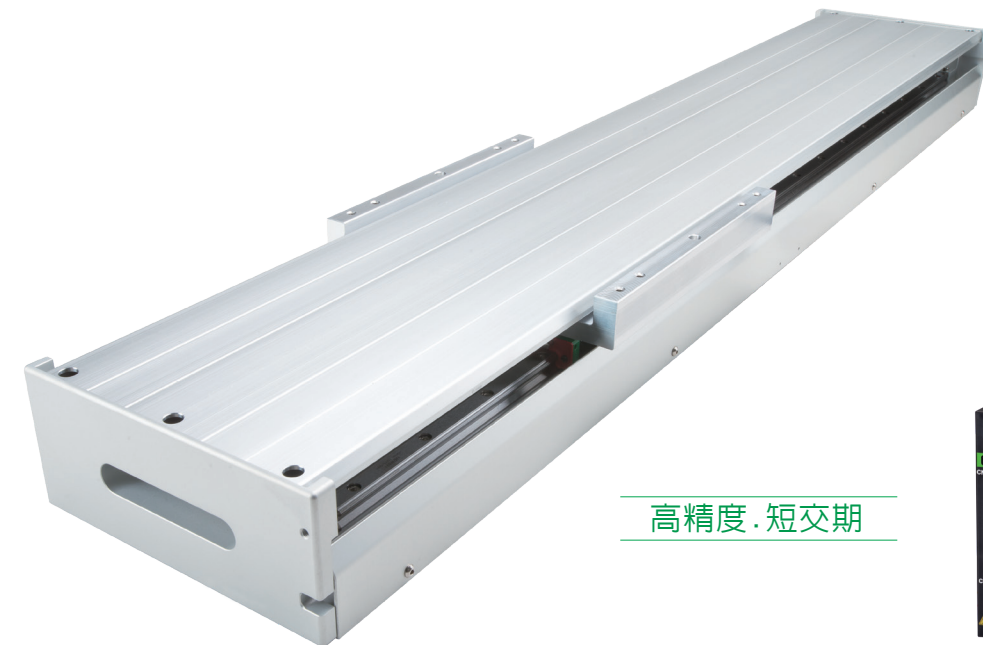
C: 其他長度與接頭, 請連繫HIWIN MIKROSYSTEM

*1:馬達3.0m散線,極限0.3m散線,編碼器3.0m D-sub-15pins
(若選用霍爾感應器時,編碼器3.0m D-sub-9pins)

產品系統架構圖



HIWIN®



高精度·短交期



搭配HIWIN MIKROSYSTEM驅動器D2T / D1

HIWIN®

全球銷售暨服務據點

大銀微系統股份有限公司
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以色列 海法

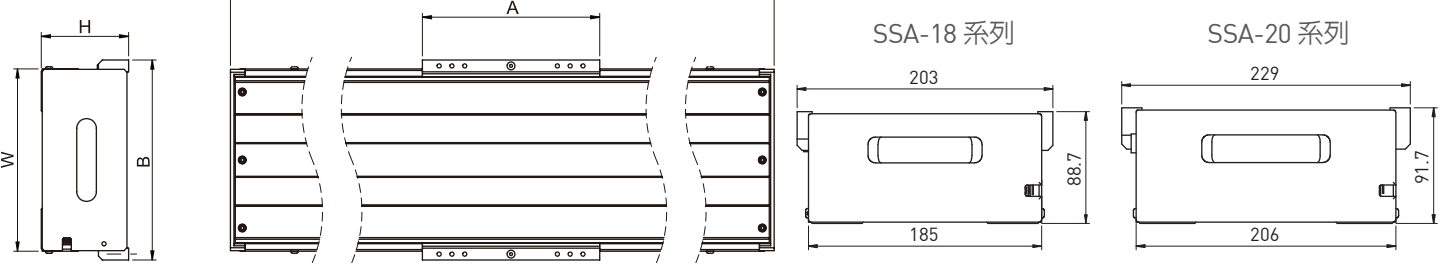
Mega-Fabs Motion Systems, Ltd.
HAIFA, ISRAEL
www.mega-fabs.com

SSA

Single Axis Linear Motor Stage

單軸線性馬達定位平台

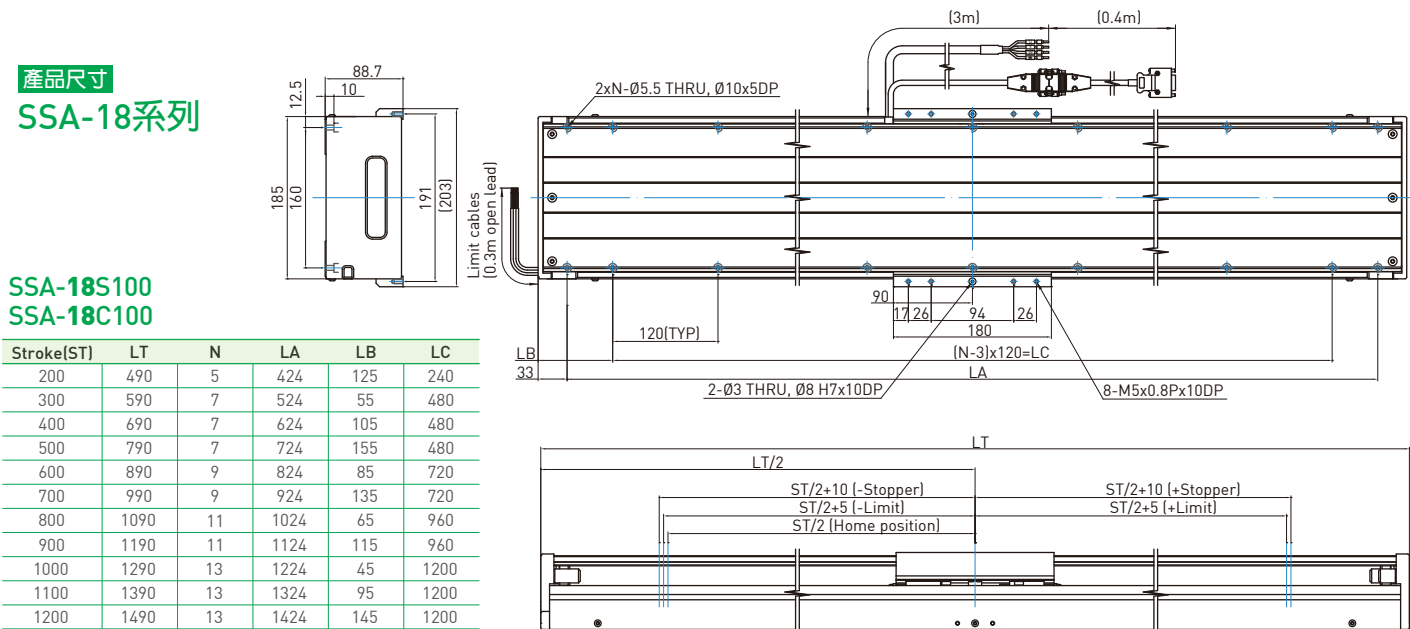
產品規格



SSA-18 系列					SSA-20 系列			
Model	SSA-18S100	SSA-18S200	SSA-18C100	SSA-18C200	SSA-20S300	SSA-20S500	SSA-20C100	SSA-20C200
滑座長度(A)	180mm	240mm	180mm	370mm	240mm	370mm	240mm	370mm
滑座寬度(B)	203mm				229mm			
底座寬度(W)	185mm				206mm			
總高(H)	88.7mm				91.7mm			
總長(L)	L=A+行程+110mm							
連續推力(N)	103	205	75	150	362	544	91	145
瞬時推力(N)	289	579	300	600	1023	1535	364	580
行程(mm)	200,250,300,350,400,450,500,550,600,650,700,750,800,850,900,950,1000,1050,1100,1150,1200 (可達2700mm)							
解析度	數位1µm 磁性尺/ 數位 1µm 光學尺 / 數位 0.1µm光學尺							
重現精度	±3µm / ±3µm / ±1µm							
水平直線度	±8µm /300 mm							
垂直直線度	±8µm /300 mm							
最大速度(m/s)	3.1	3.1	5.0	4.2	1.6	1.6	4.7	2.3
最大加速度(G)	10							
滑座重量	2.90	4.06	2.68	4.55	5.62	8.13	3.90	5.55
0行程重量(kg)	8.41	10.57	11.43	17.09	13.55	18.50	13.32	17.54
每米行程增加重量(kg/m)	16.45	16.65	20.71	21.45	19.76	20.50	27.92	28.78

※使用數位0.1μm光學尺時，最大速度1.5m/s
※行程大於1500mm外蓋有下垂現象，請聯繫HIWIN MIKOSYSTEM

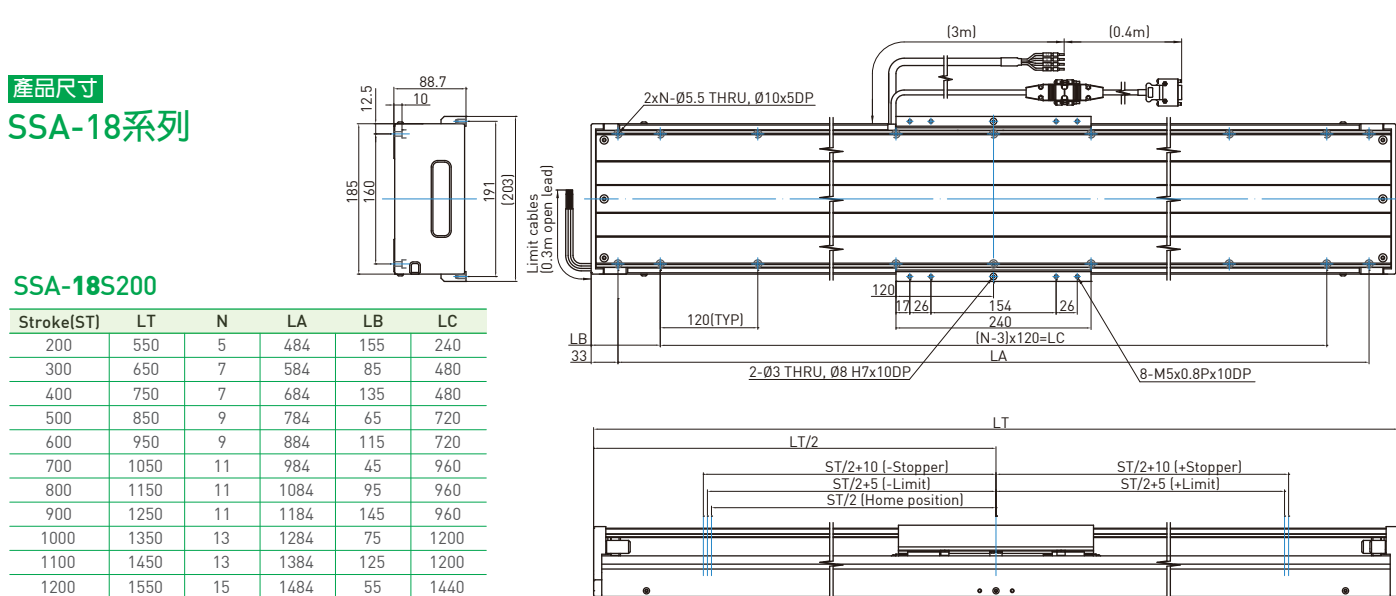
產品尺寸



Stroke(ST)	LT	N	LA	LB	LC
200	490	5	424	125	240
300	590	7	524	55	480
400	690	7	624	105	480
500	790	7	724	155	480
600	890	9	824	85	720
700	990	9	924	135	720
800	1090	11	1024	65	960
900	1190	11	1124	115	960
1000	1290	13	1224	45	1200
1100	1390	13	1324	95	1200
1200	1490	13	1424	145	1200

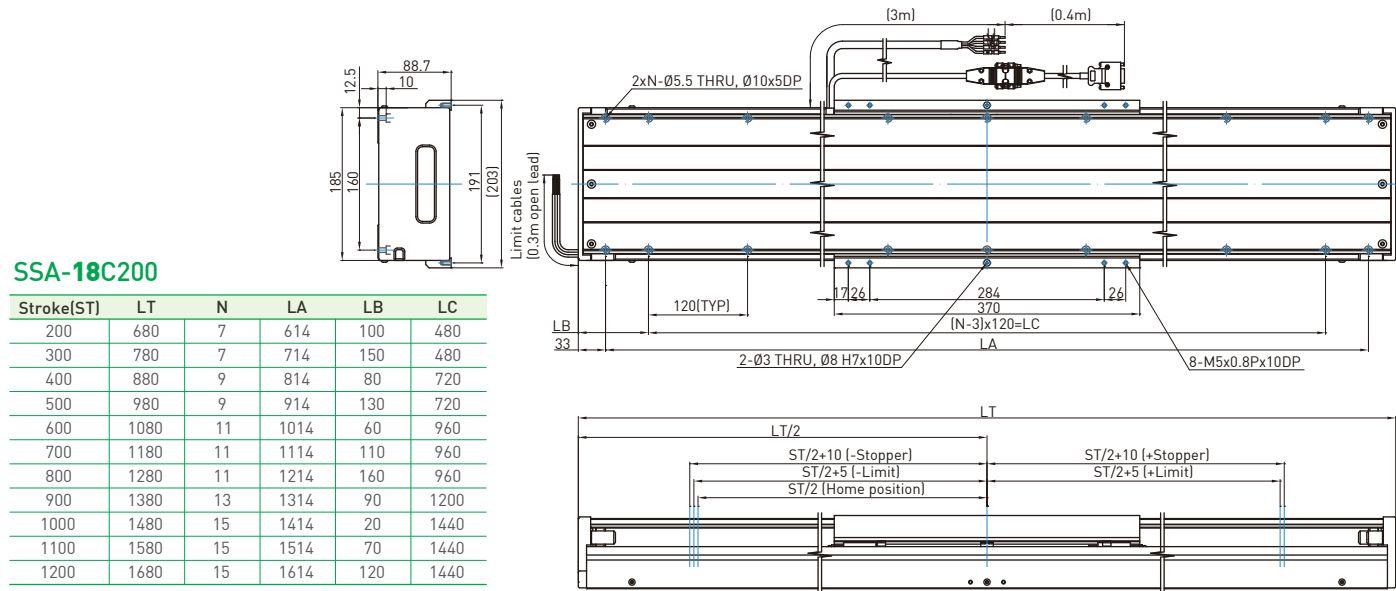
產品尺寸

SSA-18系列



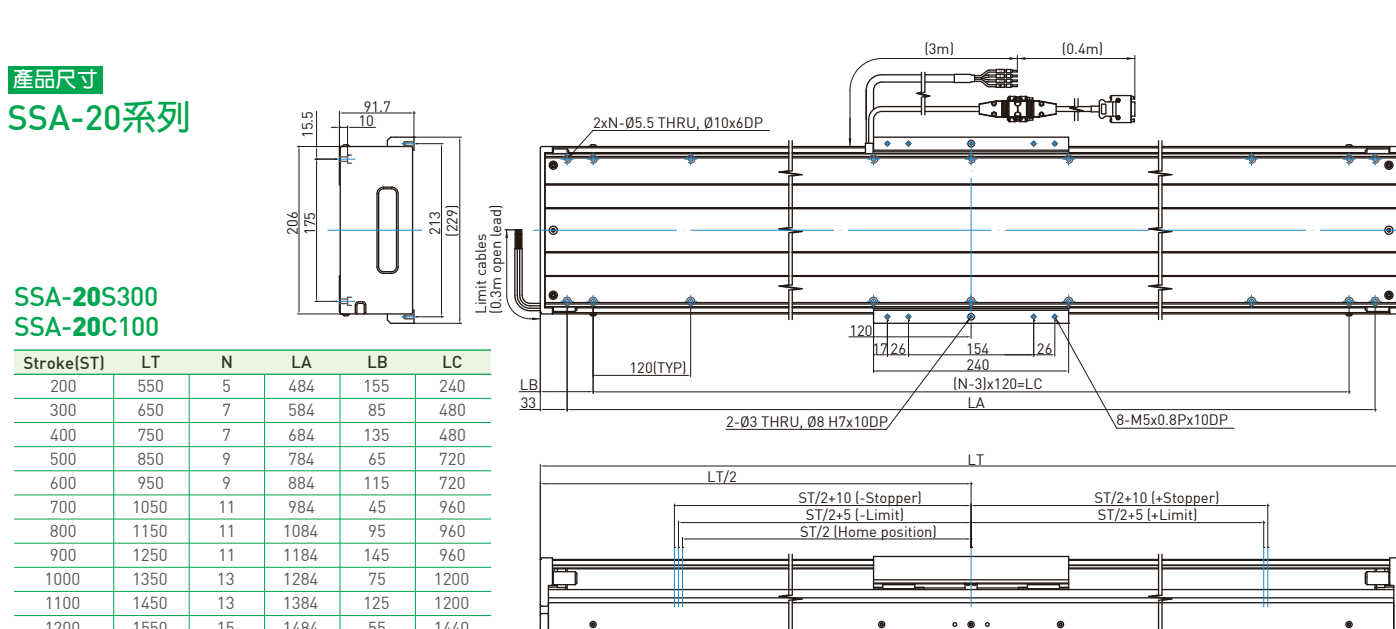
Stroke(ST)	LT	N	LA	LB	LC
200	550	5	484	155	240
300	650	7	584	85	480
400	750	7	684	135	480
500	850	9	784	65	720
600	950	9	884	115	720
700	1050	11	984	45	960
800	1150	11	1084	95	960
900	1250	11	1184	145	960
1000	1350	13	1284	75	1200
1100	1450	13	1384	125	1200
1200	1550	15	1484	55	1440

SSA-18C200



Stroke(ST)	LT	N	LA	LB	LC
200	680	7	614	100	480
300	780	7	714	150	480
400	880	9	814	80	720
500	980	9	914	130	720
600	1080	11	1014	60	960
700	1180	11	1114	110	960
800	1280	11	1214	160	960
900	1380	13	1314	90	1200
1000	1480	15	1414	20	1440
1100	1580	15	1514	70	1440
1200	1680	15	1614	120	1440

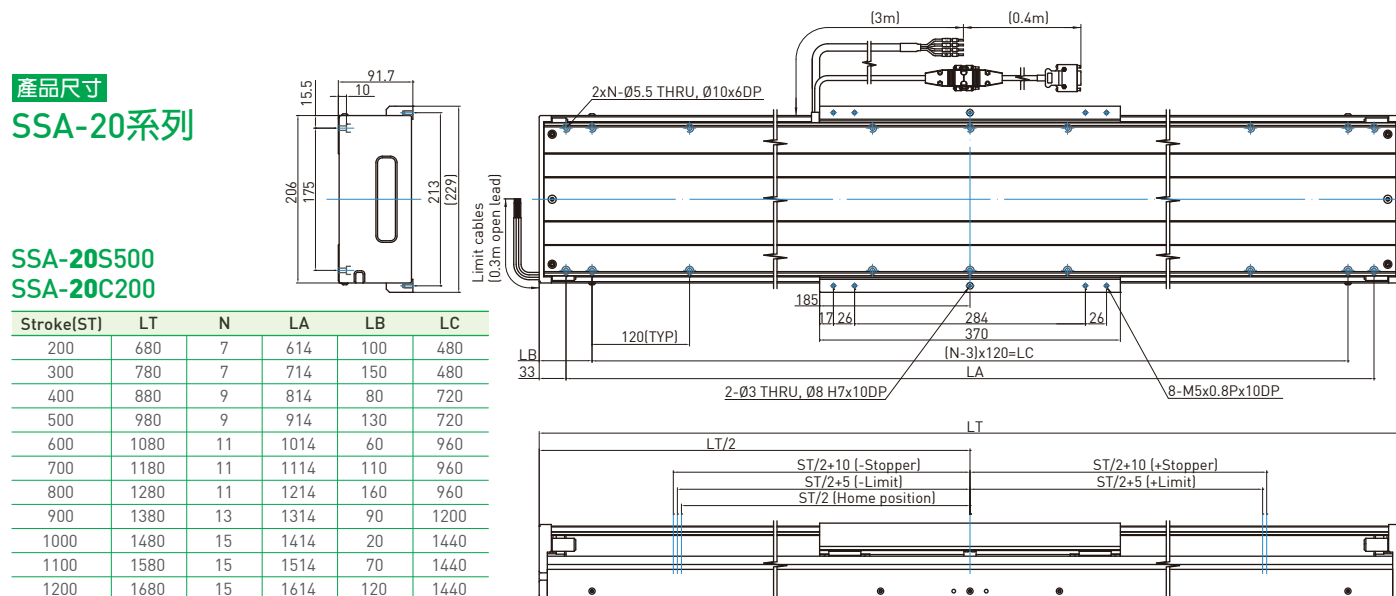
產品尺寸



Stroke(ST)	LT	N	LA	LB	LC
200	550	5	484	155	240
300	650	7	584	85	480
400	750	7	684	135	480
500	850	9	784	65	720
600	950	9	884	115	720
700	1050	11	984	45	960
800	1150	11	1084	95	960
900	1250	11	1184	145	960
1000	1350	13	1284	75	1200
1100	1450	13	1384	125	1200
1200	1550	15	1484	55	1440

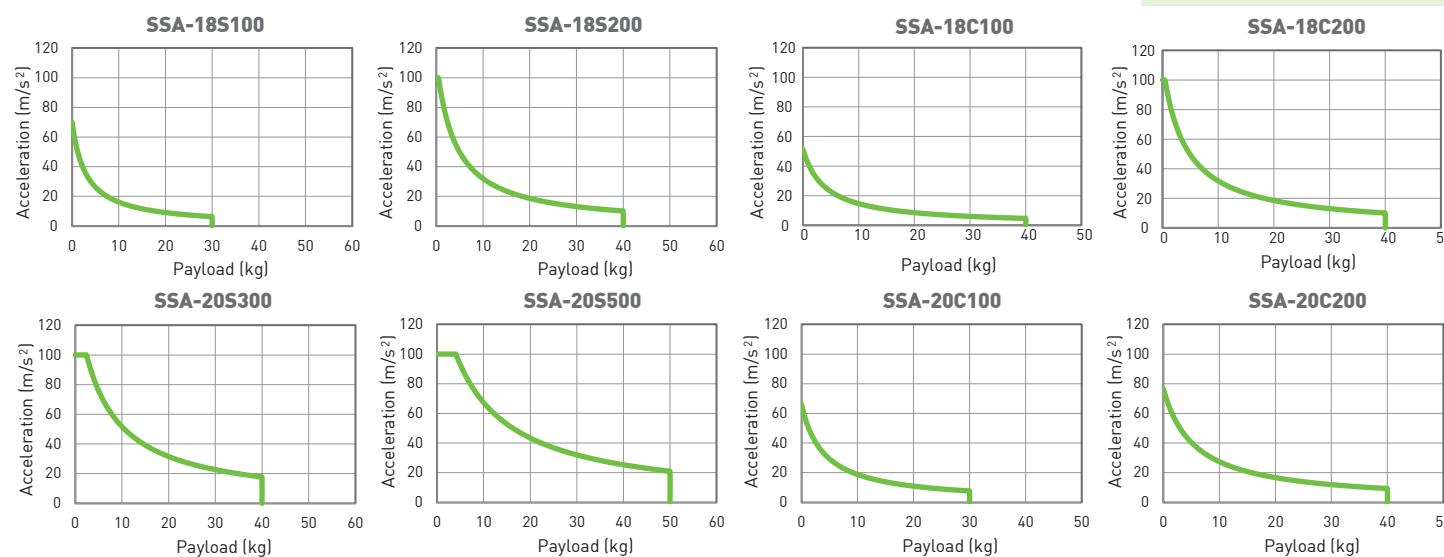
產品尺寸

SSA-20系列

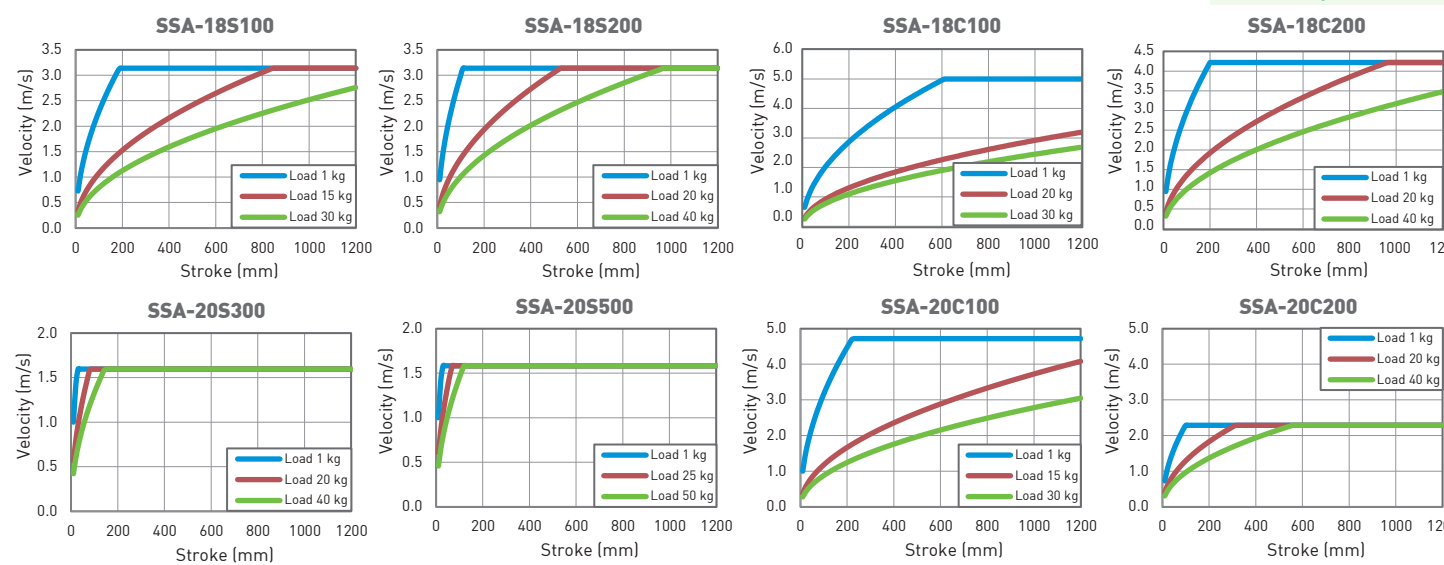


Stroke(ST)		N	LA	LB	LC
200	680	7	614	100	480
300	780	7	714	150	480
400	880	9	814	80	720
500	980	9	914	130	720
600	1080	11	1014	60	960
700	1180	11	1114	110	960
800	1280	11	1214	160	960
900	1380	13	1314	90	1200
1000	1480	15	1414	20	1440
1100	1580	15	1514	70	1440
1200	1680	15	1614	120	1440

選型輔助圖(負載速度曲線)



Velocity - Stroke



*其它重量請用內插法計算 *驅動電壓為220V
*使用數位0.1μm光學尺時，最大速度1.5m/s

Features

- Short delivery
- User friendly
- High price-performance ratio
- Efficient drive included
- High acceleration/velocity, which ball screw system cannot achieve
- Long stroke supported
- Multiple forcers supported

Application
Automation, Electronics Industry, Semi-conductor Industry, Packaging Industry



SSA Highlights

5000mm/s
Max.Velocity

0.1µm
High Encoder Resolution

±1µm
Optimal Repeatability

Model Description

LMSSA-18S100-800-GS-S-D-A0

Width code 18, 20	Option A0: Standard Ax: Customized request (cable chain, multiple forcers, hall sensor...etc. Please contact HIWIN MIKROSYSTEM)
Motor type S: Ironcore LMSA C: Ironless LMC(U Type)	Drive D: Drive with connector
Rated force level (N) 100, 200, 300, 500	Cover S: Standard top/side cover N: None
Stroke (mm) 200,250,300,350,400,450,500,550,600, 650,700,750,800,850,900,950,1000,1050, 1100,1150,1200 (For Max. stroke: 2700mm)	Cables length & connector S*: Standard C:For other lengths and connector types, please contact HIWIN MIKROSYSTEM
Encoder type G: TTL digital 1µm resolution optical encoder K: TTL digital 0.1µm resolution optical encoder E: TTL digital 1µm resolution magnetic scale	*1:Motor: 3m open end; limit switch: 0.3m open end; encoder: 3m D-sub-15pins. (With Hallsensor, encoder: 3M D-sub-9pins)

System Structure



HIWIN®



HIWIN®

Global Sales And Customer Service Site

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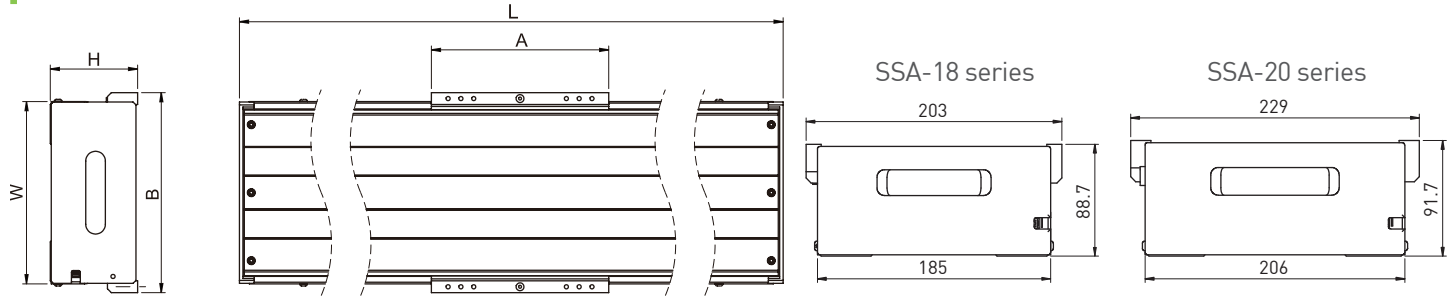
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SSA
Single Axis Linear Motor Stage

Product Dimension



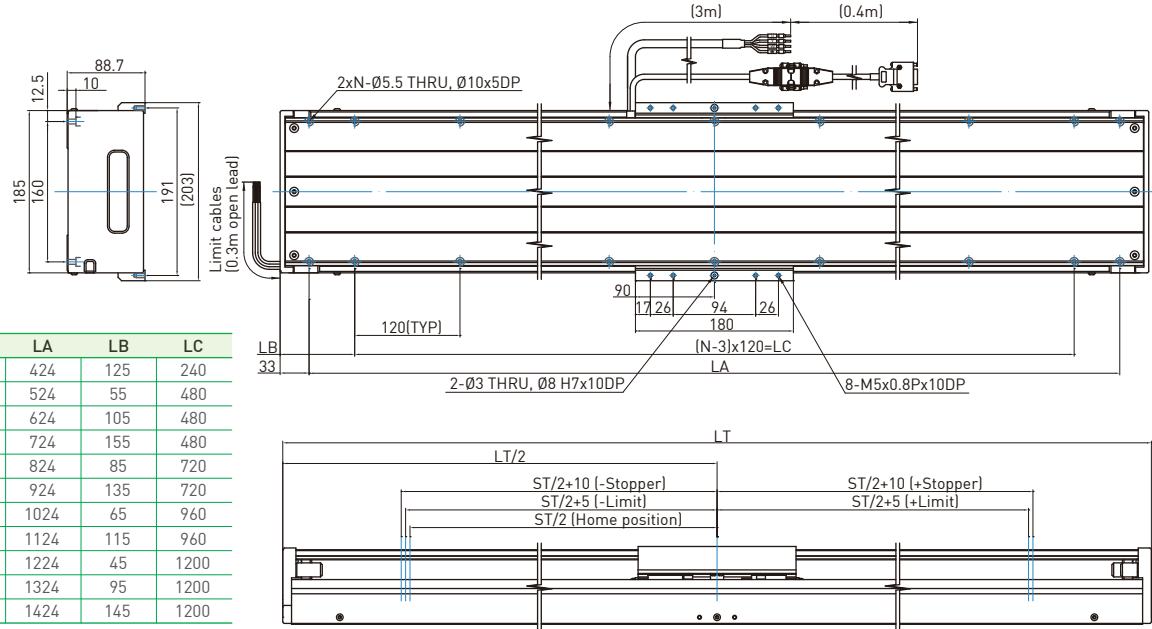
SSA-18 series					SSA-20 series				
Model		SSA-18S100	SSA-18S200	SSA-18C100	SSA-18C200	SSA-20S300	SSA-20S500	SSA-20C100	SSA-20C200
Dimension	Length(A)	180mm	240mm	180mm	370mm	240mm	370mm	240mm	370mm
	Down Width(B)	203mm				229mm			
	Up Width(W)	185mm				206mm			
	Total Height (H)	88.7mm				91.7mm			
	Total Length(L)	L=A+Stroke+110mm							
Spec.	Continuous force(N)	103	205	75	150	362	544	91	145
	Peak Force(N)	289	579	300	600	1023	1535	364	580
	Stroke(mm)	200,250,300,350,400,450,500,550,600,650,700,750,800,850,900,950,1000,1050,1100,1150,1200 (Max. stroke: 2700mm)							
	Encoder resolution	1μm magnetic scale / Digital 1μm optical encoder / Digital 0.1μm optical encoder							
	Repeatability	±3μm / ±3μm / ±1μm							
	Horizontal Straightness	±8μm /300 mm							
	Vertical Straightness	±8μm /300 mm							
	Max. Velocity (m/s)	3.1	3.1	5.0	4.2	1.6	1.6	4.7	2.3
	Max. Acceleration(G)	10							
	Moving mass (kg)	2.90	4.06	2.68	4.55	5.62	8.13	3.90	5.55
Mass of 0-stroke(kg)	8.41	10.57	11.43	17.09	13.55	18.50	13.32	17.54	
Mass per 1m stroke(kg/m)	16.45	16.65	20.71	21.45	19.76	20.50	27.92	28.78	

※ Measurement is performed on granite platform according to HIWIN standard.
※ Max. velocity varies with stroke, payload, encoder resolution and motor thrust.

Dimension
SSA-18 Series

SSA-18S100
SSA-18C100

Stroke(ST)	LT	N	LA	LB	LC
200	490	5	424	125	240
300	590	7	524	55	480
400	690	7	624	105	480
500	790	7	724	155	480
600	890	9	824	85	720
700	990	9	924	135	720
800	1090	11	1024	65	960
900	1190	11	1124	115	960
1000	1290	13	1224	45	1200
1100	1390	13	1324	95	1200
1200	1490	13	1424	145	1200



Dimension
SSA-18 Series

SSA-18S200

Stroke(ST)	LT	N	LA	LB	LC
200	550	5	484	155	240
300	650	7	584	85	480
400	750	7	684	135	480
500	850	9	784	65	720
600	950	9	884	115	720
700	1050	11	984	45	960
800	1150	11	1084	95	960
900	1250	11	1184	145	960
1000	1350	13	1284	75	1200
1100	1450	13	1384	125	1200
1200	1550	15	1484	55	1440

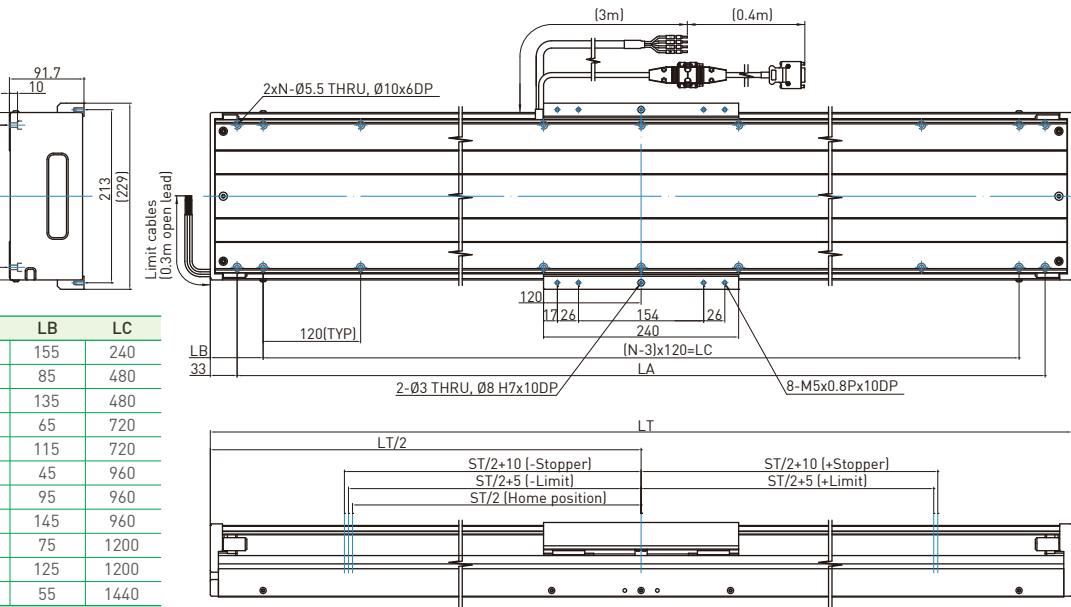
SSA-18C200

Stroke(ST)	LT	N	LA	LB	LC
200	680	7	614	100	480
300	780	7	714	150	480
400	880	9	814	80	720
500	980	9	914	130	720
600	1080	11	1014	60	960
700	1180	11	1114	110	960
800	1280	11	1214	160	960
900	1380	13	1314	90	1200
1000	1480	15	1414	20	1440
1100	1580	15	1514	70	1440
1200	1680	15	1614	120	1440

Dimension
SSA-20 Series

SSA-20S300
SSA-20C100

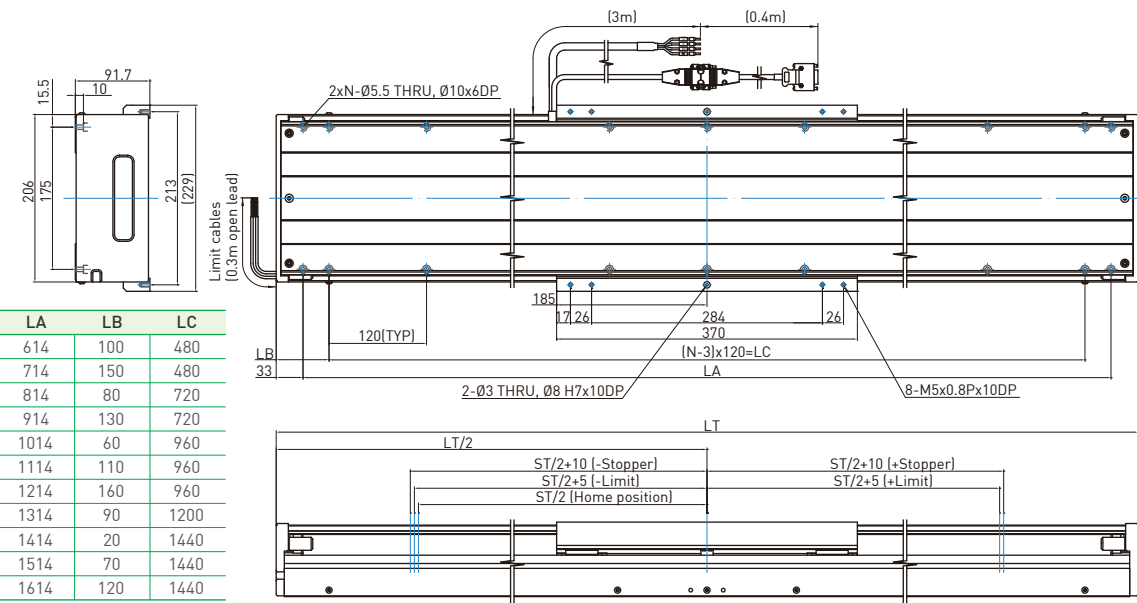
Stroke(ST)	LT	N	LA	LB	LC
200	550	5	484	155	240
300	650	7	584	85	480
400	750	7	684	135	480
500	850	9	784	65	720
600	950	9	884	115	720
700	1050	11	984	45	960
800	1150	11	1084	95	960
900	1250	11	1184	145	960
1000	1350	13	1284	75	1200
1100	1450	13	1384	125	1200
1200	1550	15	1484	55	1440



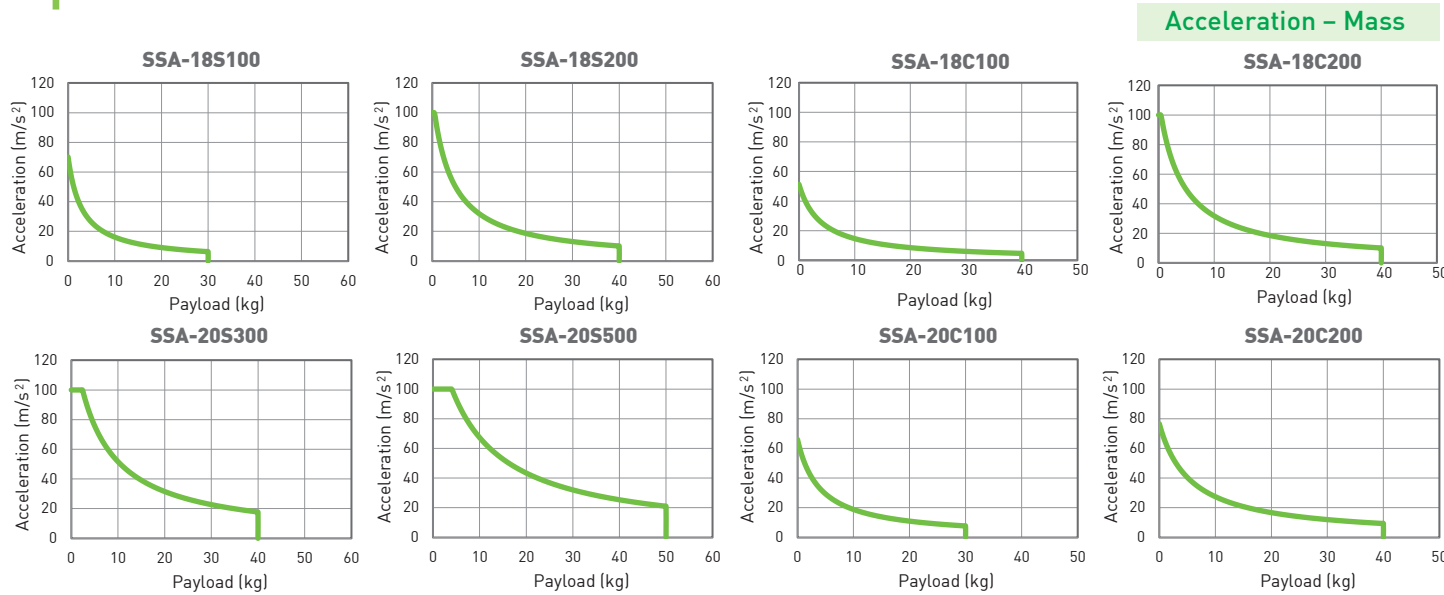
Dimension
SSA-20 Series

SSA-20S500
SSA-20C200

Stroke(ST)	LT	N	LA	LB	LC
200	680	7	614	100	480
300	780	7	714	150	480
400	880	9	814	80	720
500	980	9	914	130	720
600	1080	11	1014	60	960
700	1180	11	1114	110	960
800	1280	11	1214	160	960
900	1380	13	1314	90	1200
1000	1480	15	1414	20	1440
1100	1580	15	1514	70	1440
1200	1680	15	1614	120	1440



Sizing Diagram (Acceleration/velocity-payload curve)



Acceleration – Mass

Velocity – Stroke

*For other payload please calculate with interpolation method.
*With digital 0.1μm resolution optical scale, the max. velocity is 1.5m/s

*Voltage: 220V